This test lasts half an hour. Show your work.

1. What is 10.70180 to the nearest hundredth? 10.70

2. Write sixty-four and thirty-four ten-thousandths as a decimal. 64.0034

3. What is .319 + 56.007 + 8.252? 64.578

4. What is 5.816 - 4.98? .836

5. What is 3.18 times 2.23? 7.0914

6. What is 6.804 divided by 6? 1.134

7. What is 16.15 divided by 3, rounded to 3 decimal places? 5.383

8. What is your estimate for 9.0723 divided by 3.0005, rounded to one decimal place? 3.0

9. What is 17/3 rounded to 4 decimal places? 5.6667

10. What values can the number \( x \) take if \( x > 4 \) and \( x \leq 5 \)? Any \( x \) between 4 and 5, excluding 4 but including 5.

11. What values can the number \( x \) take if \( x \) is in \([10, 11)\)? Any \( x \) such that \( x \geq 10 \) and \( x < 11 \).

12. What values can the number \( x \) take if \( x \) is in \( \{10, 11\} \)? Just 10 or 11.

13. What is the ratio of 7 yards to 14 feet? 3 to 2.

14. Explain why it is true or false that \( \frac{35}{45} = \frac{12}{18} \). False, because \( \frac{7}{9} \neq \frac{2}{3} = \frac{6}{9} \).

15. If \( \frac{6}{10} = \frac{15}{x} \), what is \( x \)? \( x = 25 \).

16. If \( \frac{0}{10} = \frac{x}{.89745} \), what is \( x \)? Zero

17. What does “Venite Adoremus” mean? Come you-all, let us adore.

18. A pint of water contains 16 ounces of water. What is the weight of 8 ounces of water, measured in pounds? 1/2 pound.

19. How many pennies are in a shilling? 12 (or 5 new pence)

20. What does it mean for something to be obsolete? It means that it is no longer useful because there is a newer thing that replaced it.

**Bonus question.** Explain (a) how to add decimals, and (b) how to divide decimals to someone in 5th grade who has just learned what a decimal is. Don’t just start writing. Think about how you would do (a), and then write it out carefully, and then read it over and decide what you want to change in your explanation. Then do the same for (b).

(a) Line up the numbers with the decimal points above each other, adding zeroes after the decimal if necessary. Then subtract in the usual way, always inserting the decimal point below the original decimal points.

(b) Not enough room on this page.